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| APPLICATION NO.  | FILING DATE    | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |  |
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| 09/472,401   | 12/27/1999     | MASAHIRO SUEYOSHI    | YAMAP0689US             | 8682             |  |
| 75   | 590 08/06/2003 |                      |                         |                  |  |
| NEIL A DUCHEZ<br>RENNER OTTO BOISSELLE & SKLAR PLL<br>1621 EUCLID AVENUE |                |                      | EXAMI                   | EXAMINER         |  |
|  |                |                      | AN, SHAWN S             |                  |  |
| NINETEENTH FLOOR<br>CLEVELAND, OH 44115                                  |                | ART UNIT             | PAPER NUMBER            |                  |  |
| ·  |                |                      | 2613                    | 7                |  |
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Please find below and/or attached an Office communication concerning this application or proceeding.

Application No. 09/472.401

Shawn An

Applicant(s)

Office Action Summary

Examiner

Art Unit

Masahiro Sueyoshi et al.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address -Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filled after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1,704(b). Status 1) X Responsive to communication(s) filed on *Jun 24, 2003* 2a) This action is **FINAL**. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213. Disposition of Claims 4) 💢 Claim(s) <u>1, 2, 6, 9, 10, and 13</u> is/are pending in the application. 4a) Of the above, claim(s) \_\_\_\_\_\_\_ is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) X Claim(s) <u>1, 2, 6, 9, 10, and 13</u> is/are rejected. 7) Claim(s) \_\_\_\_\_\_ is/are objected to. \_\_\_\_\_ are subject to restriction and/or election requirement. 8) Claims **Application Papers** 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are a) □ accepted or b) □ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner. If approved, corrected drawings are required in reply to this Office action. 12) The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. §§ 119 and 120 13) Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)  $\boxtimes$  All b)  $\square$  Some\* c)  $\square$  None of: 1. 🛛 Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). \*See the attached detailed Office action for a list of the certified copies not received. 14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e). a) The translation of the foreign language provisional application has been received. 15) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. Attachment(s) 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s). 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) Notice of Informal Patent Application (PTO-152) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s). 6) Other:

- Art Unit: 2613

#### **DETAILED ACTION**

## Response to Restriction Election

1. Applicant's election without <u>traverse</u> of claims 1-2, 6, 9-10, and 13 which reads on Species of Figure 1 has been acknowledged.

The requirement is still deemed proper and is therefore made FINAL.

## Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claim 2 is rejected under 35 U.S.C. 102(b) as being anticipated by Huang et al (5,617,145).

Regarding claim 2, Huang et al discloses an encoding device, comprising:

an encoding section (Fig. 1) for generating bit streams having a variable frame length from an input audio signal, a maximum frame length of the bit streams being fixed (Constant Rate);

a storage section (11) for storing the bit streams generated by the encoding section; and a transfer section (14) for transferring the bit streams at a prescribed transfer rate,

wherein the storage section includes a buffer having a capacity corresponding to at least a value which corresponds to maximum frame length (max bit stream generated in one frame time period) (Fig. 9, Bfmax),

wherein the encoding section generates a bit stream so that a sum of an amount of the bit streams stored in the storage section at the moment when the bit stream for one frame time period Art Unit: 2613

are generated (Fig. 9, 2Td) and an amount of the bit stream for one frame time period (Td) is equal to or less than the capacity of the storage section (Fig. 9, Bfmax).

## Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 1, 6, 9, 10, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huang et al (5,617,145)

Regarding claims 1, 6, and 10, Huang et al discloses an encoding device, comprising: an encoding section (Fig. 1) for generating bit streams having a variable frame length from an input audio signal, a maximum frame length of the bit streams being fixed (Constant Rate);

a storage section (11) for storing the bit streams generated by the encoding section; and a transfer section (14) for transferring the bit streams at a prescribed transfer rate,

wherein the storage section includes a buffer having a capacity corresponding to at least a value which can be obtained by subtracting an amount of the bit streams transferable in one frame time period (Fig. 9, Td) at a minimum possible transfer (bit) rate (Fig. 3) from a value of the maximum frame length (max bit stream generated in one frame time period) (Fig. 9, Bfmax).

Huang et al does not specifically disclose the storage section having the capacity of <u>twice</u> the maximum frame length.

Art Unit: 2613

However, the Examiner takes official notice that expanding or doubling the size of the encoder storage device is conventionally well known in the art for storing/accommodating additional bit streams.

Furthermore, the Examiner takes offical notice that the decoding device decoding the compressed audio/video data is obviously well known features for reverse processing the encoding device for displaying the compressed data.

Moreover, Huang et al discloses bit rate determination module (Fig. 5, 106) for determining maximum transfer bit rate.

Therefore, it would have been obvious to a person of ordinary skill in the relevant art employing an encoding device as taught by Huang et al to incorporate the well known concept of expanding or doubling the size of the encoder storage device so that the storage section has the capacity of twice the maximum frame length for the well known reason of storing/accommodating additional bit streams or a bit stream accumulating section having the capacity of at least a value which is obtained by multiplying the maximum frame length with a value obtained by dividing the maximum transfer rate divided by minimum transfer rate so as to avoid a buffer overflow.

Regarding claim 9, Huang et al discloses a transmitter (Fig. 1, 14) for transmitting the bit streams. Further, the Examiner takes official notice that a receiver is considered an obvious feature for receiving the bit streams, and decoding the compressed audio bit streams.

Regarding claim 13, Huang et al discloses an audio bit stream (Fig. 1, 3).

Art Unit: 2613

#### Conclusion

- 6. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure.
  - A) Oishi et al (5,511,054), Apparatus and method for multiplexing encoded data signals and recording medium having multiplexed signals recorded thereon.
  - B) Blanchard (5,793,431), Audio/video discrepancy management.
- 7. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-4700.
- 8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shawn An whose telephone number (703) 305-0099 and schedule are Tuesday-Friday.

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August 4, 2003